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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,975	12/09/2003	Tsuyoshi Yamashita	24-011-TB	2217
23400	7590	02/24/2005	EXAMINER	
POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190			HOLLINGTON, JERMELE M	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/729,975

Applicant(s)

YAMASHITA, TSUYOSHI

Examiner

Jermele M. Hollington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/03/04/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper."

Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered [see page 3, line 12].

2. The information disclosure statement filed April 20, 2004 has been placed in the application file, but the information referred to therein has not been considered because the information has been placed in IDS filed on December 9, 2003.

### *Specification*

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because the abstract is not in a single paragraph as stated above. Correction is required. See MPEP § 608.01(b).

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Fukasawa et al (6593761).

Regarding claim 3, Fukasawa et al disclose [see Fig. 4] a temperature control method for controlling the temperature of an electronic component (semiconductor device D) to be tested during the testing of the electronic component (D) in an electronic component handling apparatus (handler 11), comprising: cooling [via cooler 35] of the electronic component (D) to be tested is performed by cooling a heat absorbing and radiating body (temperature sensor 17) to which the heat of the electronic component is transferred; and heating of the electronic component (D) to be tested is performed by a heater (heater 25) which is provided such that thermal resistance with said body (17) increases.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al (6445203) in view of Tustaniwskyj et al (5821505).

Regarding claim 1, Yamashita et al disclose [see Figs. 1-4] a heater-equipped pusher (pusher 30) for pushing a terminal of an electronic component (IC chip 2) to be tested in an electronic component handling apparatus into a contact portion of a test head (test head 5), comprising: a pusher main body (rod 31) which is capable of direct contact with the electronic component (2) to be tested; a heat absorbing and radiating body (temperature 114) provided on said pusher main body (31); a heater (heat exchanger 94); and a thermal insulating material (radius groove 112). However, they do not disclose a heater as claimed. Tustaniwskyj et al disclose [see Fig. 12] a heater-equipped pusher (heat sink 14) comprising: pusher main body (sink base 14a), a heat absorbing and radiating body (temperature sensor 14f) on said pusher main body (14a), a heater (heater 13) provided on said pusher main body (14a) to enable direct or indirect contact with a electronic component (electronic device 11) to be tested; and a thermal insulating material (thermally conductive layer 102 shown in Fig. 18) provided between the main body (14a) and the heater (13). Further, Tustaniwskyj et al teach that the addition of a heater on a main body is advantageous because it maintains the temperature of an electronic device near a constant set point temperature while the device is being tested. It

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would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus of Yamashita et al by adding a heater on the main body as taught by Tustaniwskyj et al in order to maintain the temperature of an electronic device near a constant set point temperature while the device is being tested.

Regarding claim 2, Yamashita et al disclose [see Fig. 1] an electronic component handling apparatus (chamber 102) which, in order to test an electronic component (IC chip 2), is capable of pushing a terminal of an electronic component (2) to be tested into a contact portion of a test head (test head 5), comprising the heater-equipped pusher (pusher 30) according to claim 1.

### *Conclusion*

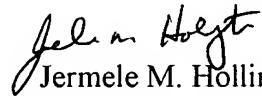
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kiyokawa et al (5742168), Ahmad et al (6147506), Takahashi et al (6313653), Yamashita et al (6456062, 6590383 & 6741090), and Jones et al (6489793) disclose a method and apparatus for testing a device under test inside a temperature chamber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (517) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jermele M. Hollington  
Patent Examiner  
Art Unit 2829

JMH  
February 18, 2005